

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460



Office of Pesticide Programs

MEMORANDUM

10/4/2018

SUBJECT: Product Chemistry Review for **CRB** EPA Reg. No. **5813-REN**; DP **449097**

FROM: Sergey Alekseyev, Chemist
Product Science Branch, CTT

Registrant: The Clorox Company c/o
PS&RC

S. Alekseyev *K. Hicks*

Action code: (540) New Product; Non-
Fast Track; FIFRA Sec. 2(MM) Uses

THROUGH: Karen Hicks, Team Leader
Product Science Branch
Antimicrobials Division (7510P)

Agency Due Date: 01-06-2019

Submission No. 1023606

TO: Demson Fuller/Ben Chambliss
PM Team 32
Regulatory Management Branch II
Antimicrobials Division (7510P)

E-Sub No.: 31593

Formulation: EUP

Pesticide classification: disinfectant,
antimicrobial

MRID(s): 432329-01, 506322-01, 506322-02, and 505457-01

PC Code	CAS No.	Name	% by wt.
014703	7681-52-9	Sodium hypochlorite	7.5
		Other ingredients	92.5
		Total	100.0%

I. BACKGROUND

The Registrant, The Clorox Company, has submitted a pesticide registration for their product: CRB EPA Reg. No. 5813-REN. This non-integrated, end-use, and non-food use product is formulated for use as a hard surface disinfectant, food contact surface sanitizer, non-food contact surface sanitizer, and laundry sanitizer.

II. RELEVANT DOCUMENTS

	RECEIVED	N/A
EPA FORM 8570-1 – Application for Pesticide (Registration) (8/15/2018)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
EPA FORM 8570-34 – Certification with Respect to Citation of Data (8/15/2018)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
EPA FORM 8570-27 – Formulator’s Exemption Statement	<input checked="" type="checkbox"/>	<input type="checkbox"/>
EPA FORM 8570-35 – Data Matrix (8/15/2018)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cover letter (8/15/2018)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Transmittal document	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Proposed CSF BASIC, (8/9/2018)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Proposed CSF ALTERNATE 1, (8/9/2018)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Proposed label (8/15/2018)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Certification for Pilot Fragrance Notification Program	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
REFERENCED: CSF	--	
Comments: None.		

III. FINDINGS

a. Product Formulation:

	TGAI	MUP	EUP	Food use	Non-food use
Non-integrated	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Integrated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Active Ingredients(s)			Nominal	Upper limit	Lower limit

Sodium hypochlorite	7.5%	9.45%	5.7%
	YES	NO	N/A
1. The certified limits of all ingredients are within 40 CFR standard certified limits.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Wider certified limits were requested and rationale was accepted.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. The nominal concentration(s) of the active ingredient is in agreement with the label.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. The chemical IDs and analytical information for density, pH, and flammability are consistent with Series 830 Group B data.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. All inert ingredients are approved for non-food use pesticide formulations.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. The impurities present >0.1% are identified.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Impurities of toxicological significance have an upper certified limit.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

b. Product Label:

	Yes	NO	N/A
<i>The formula contains one of the following:</i>			
1. 10% or more of petroleum distillate	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. 1.0% or more of methyl alcohol	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Sodium nitrite at any level	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. A toxic list 1 inert at any level	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Arsenic in any form	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. If yes to 1-5, then the inert ingredient list contains a relevant	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Appropriate warning statements regarding flammability or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. The storage and disposal instructions for the pesticide	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. The product requires an expiration date at which time the	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

IV. Additional Findings

1. The proposed basic CSF and Alternate CSF #1 (both dated 08/09/2018) are acceptable. The certified limits for the active ingredient are wider than 40 CFR §158.350 proposes to compensate the active ingredient degradation over time, variation in raw material process capability limitations, and measurement accuracy.
2. The one-year storage stability and one-year corrosion characteristics studies are underway.
3. The proposed label was screened as it pertains to the product chemistry requirements. The final review of the product label is the purview of the PM team.

V. Conclusion

The registrant has satisfied the product chemistry requirements for the registration of EPA Reg. No. **5813-REN**.

VI. Table A:
Series 830 guidelines – Group A

OCSPP#	Name	Status	MRID
830.1550	Product Identity & Composition	Y	506322-01
830.1600	Description of materials	Y	506322-01
830.1620	Description of production process	N/A	
830.1650	Description of formulation process	Y	506322-01
830.1670	Discussion of formation of	Y	506322-01
830.1700	Preliminary analysis	N/A	
830.1750	Certified limits	Y	506322-01 and CSFs
830.1800	Enforcement analytical method	Y	50545701
830.1900	Submittal of samples	N/A	

VII. Table B: Series 830 guidelines – Group B

OCSP#	Name	Study Findings/Comment	Status	MRID
830.6302	Color	Yellow	Y	50632201
830.6303	Physical state	Clear liquid	Y	50632201
830.6304	Odor	Moderate characteristic bleach	Y	50632201
830.6313	Stability to normal & elevated temperatures, metals & metal ions	The product is not TGAI.	N/A	
830.6314	Oxidation/Reduction Chemical Incompatibility	Standard oxidation potential of hypochlorite is +0.9 V, the product is reducer.	Y	43232901
830.6315	Flammability	The product does not contain combustible components.	W	50632202
830.6316	Explodability	The product does not contain explosive ingredients.	W	50632202
830.6317	Storage stability	The study is in progress.	I	50632202
830.6319	Miscibility	The product is not an emulsifiable liquid that will be diluted with petroleum solvents.	W	50632202
830.6320	Corrosion characteristics	The study is in progress.	I	50632202
830.6321	Dielectric breakdown voltage	The product is not intended for use near electrical equipment.	W	50632202
830.7000	pH	12.07 at 25°C	Y	50632201
830.7050	UV/Visible absorption	Not required for MUP or EP	N/A	
830.7100	Viscosity	1.50 cP at 20°C, 1.00 cP at 40°C	Y	50632201
830.7200	Melting point	Not required for MUP or EP	N/A	
830.7220	Boiling point	Not required for MUP or EP	N/A	
830.7300	Density/relative	1.08272 g/mL (9.036 lbs./gal) at 20.83°C	Y	50632201
830.7370	Dissociation constants	Not required for MUP or EP	N/A	
830.7520	Particle size	Not required for MUP or EP	N/A	
830.7550/	Partition coefficient	Not required for MUP or EP	N/A	
830.7840/	Water solubility	Not required for MUP or EP	N/A	
830.7950	Vapor pressure	Not required for MUP or EP	N/A	

Explanations: Y = Requirement fulfilled; N = Requirement not fulfilled; N/A = Not applicable; G = Data gap; U = Upgradeable; I = Incomplete or in progress; W = Waived